

Appl. No. 10/037,670
Amtd. dated 11/30/2005
Reply to Office Action of 08/29/2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended):

A method, comprising:

receiving from a first requester a request to write a second indicator that comprises an identifier of the first requester to a first indicator-set-by-write register that indicates if a component is available; ~~available, the request comprising the identifier of the first requester;~~

determining, in response to receiving the write request from the first requester, whether the component is available; and

replacing, if the component is available, ~~contents of the first indicator-set-by-write register~~ indicating that the component shared resource is available, with the identifier of the first requester to reduce second indicator reducing access to the component, component and to permit access to the component by the first requester.

2-6. (cancelled)

7. (currently amended):

The method of claim 1, wherein determining, in response receiving the write request from the first requester, whether the component is available comprises determining a presence of the first indicator - ~~an absence of an identifier of a requester other than the first requester in the set-by-write register.~~

8. (previously presented):

The method of claim 1, wherein determining, in response to receiving the write request from the first requester, whether the component is available comprises determining based on an external indicator that the component is available.

9. (original):

The method of claim 8, wherein the external indicator comprises a flag.

10. (currently amended):

The method of claim 1, further comprising receiving, by execution of a write request by a second requester from the first requester upon completion of access to the component by the second requester, a value indicating that the shared resource is available third indicator increasing access to the component to replace the ~~contents of the set-by-write register, second indicator.~~

Appl. No. 10/037,670
Amtd. dated 11/30/2005
Reply to Office Action of 08/29/2005

11. - 14. (cancelled)

15. (currently amended):

A method, comprising:

receiving from a first requester a request to write a ~~second indicator~~ that comprises an identifier of the first requester to a ~~first indicator set-by-write register~~ that indicates if a component is ~~available~~; ~~available, the request comprising the identifier of the first requester;~~

determining, in response to receiving the write request from the first requester, whether the component is available;

prohibiting accesses to the component by one or more additional requesters;

replacing, because the component is available, ~~contents of the first indicator set-by-write register~~ indicating that the component is available, with the ~~identifier of the first requester to reduce second indicator reducing access to the component; and~~

allowing the first requester to indicate that the component is available.

16. - 21. (cancelled)

22. (currently amended):

The method of claim 15, wherein determining, in response to receiving the write request from the first requester, whether the component is available comprises determining a ~~presence of the first indicator indicating that a component is available, an absence of an identifier of a requester other than the first requester in the set-by-write register.~~

23. (previously presented):

The method of claim 15, wherein determining, in response to receiving the write request from the first requester, whether the component is available comprises determining based on an external indicator that the component is available.

24. (original):

The method of claim 23, wherein the external indicator comprises a flag.

25. (currently amended):

The method of claim 15, further comprising:

receiving from ~~a second~~ the ~~first~~ requester a request to write a ~~value indicating that the shared resource is available; third indicator increasing access to the component;~~

determining, because of receiving the ~~value indicating that the shared resource is available, third indicator~~, that access to the component has been increased; and

replacing the ~~contents of the set-by-write register second indicator with the third indicator increasing access to the component. value indicating that the shared resource is available.~~

Appl. No. 10/037,670
Amtd. dated 11/30/2005
Reply to Office Action of 08/29/2005

26. (cancelled)

27. (currently amended):

A method of obtaining access to a shared resource, comprising:

receiving a request to write a second value that comprises an identifier of a requester to a register, the request comprising the identifier of the first requester; register; and

changing a first value to the second value in response to the request to write to the register if the register detects that the first value indicates that the shared resource is available; and

limiting access to the shared resource.

28-30. (cancelled)

31. (original):

The method of claim 30, further comprising reading the register to determine that the register contains the identifier.

32. (previously presented):

The method of claim 27, wherein the shared resource comprises a peripheral device in a computer system and the peripheral device contains the register.

33. (original):

The method of claim 27, further comprising:

receiving from the register the first value indicating that the shared resource is available; accessing the shared resource; and

changing upon completion of access to the shared resource, the second value to a third value increasing access to the shared resource.

34. (original):

The method of claim 33, wherein changing the second value to the third value comprises writing the third value to the register.

35. (original):

The method of claim 34, wherein the first value, the second value and the third value comprise variables.

36. (original):

The method of claim 35, wherein the first value and the third value comprise a same variable.

37. (currently amended):

A method, comprising:

Appl. No. 10/037,670
Amtd. dated 11/30/2005
Reply to Office Action of 08/29/2005

executing by a process a request from a requester to write an identifier of the requester, the request comprising the identifier of the requester;
determining by a register, in response to the request, whether a first indicator allowing access to a shared resource is present in the register;
changing by the register if the first indicator is present, the first indicator to a second indicator comprising the identifier of the requester and reducing access to the shared resource;
sending by the register the first indicator to the process;
determining by the process receipt of the first indicator;
using by the process the shared resource; and
replacing by the process the second indicator with a third indicator increasing access to the shared resource.

38-43. (cancelled)

44. (original):

The method of claim 43, wherein replacing the second indicator with the third indicator comprises writing the third indicator to the register.

45. (original):

The method of claim 44, wherein the first indicator and the third indicator comprise the same indicator.

46. (currently amended):

An article of manufacture comprising a machine-accessible medium including thereon sequences of instructions that, when executed, cause a machine to:

receive from a first requester a request to write a second indicator that comprises an identifier of the first requester to a first indicator set-by-write register that indicates if a component is available; available, the request comprising the identifier of the first requester;

determine, in response to the write request received from the first requester, whether a component is available; and

replace, if the component is available, contents of the first indicator set-by-write register indicating that the component shared resource is available, with the identifier of the first requester to reduce second indicator reducing access to the component, component and to permit access to the component by the first requester.

Appl. No. 10/037,670
Amdt. dated 11/30/2005
Reply to Office Action of 08/29/2005

47-51. (cancelled)

52. (currently amended):

The article of claim 46, wherein the sequences of instructions that cause the machine to determine, in response to the write request received from the first requester, whether the component is available comprise sequences of instructions that, when executed, cause the machine to determine, in response to the request to write the second indicator by the first requester, ~~a presence of the first indicator, an absence of an identifier of a requester other than the first requester in the set-by-write register.~~

53. (previously presented):

The article of claim 46, wherein the sequences of instructions that cause the machine to determine, in response to the write request received from the first requester, whether the component is available comprise sequences of instructions that, when executed, cause the machine to determine, in response to the request to write the second indicator by the first requester, that the component is available based on an external indicator.

54. (previously presented):

The article of claim 53, wherein the sequences of instructions that cause the machine to determine, in response to the write request received from the first requester, based on an external indicator that the component is available comprise sequences of instructions that, when executed, cause the machine to determine, in response to receiving the write request from the first requester, that the component is available based on a flag.

55. (currently amended):

The article of claim 46, further comprising sequences of instructions that, when executed, cause the machine to receive, ~~by execution of an operation by a second requester~~ receiving from the first requester upon completion of access to the component by the second requester, a value indicating that the shared resource is available ~~third indicator increasing access to the component to replace the contents of the set-by-write register~~ second indicator.

56. - 59. (cancelled)

60. (currently amended):

An article of manufacture comprising a machine-accessible medium including thereon sequences of instructions that, when executed, cause a machine to:

receive from a first requester a request to write a second indicator that comprises an identifier of the first requester to a ~~first indicator set-by-write register~~ that indicates if a component is available; ~~available, the request comprising the identifier of the first requester;~~

determine, in response to receiving the write request from the first requester, whether the component is available;

prohibit accesses by one or more additional requesters;

Appl. No. 10/037,670
Amtd. dated 11/30/2005
Reply to Office Action of 08/29/2005

replace, because the component is available, contents of the first indicator set-by-write register indicating that the component is available, with the identifier of the first requester to reduce second indicator reducing access to the component; and allow the first requester to indicate that the component is available.

61-66. (cancelled)

67. (currently amended):

The article of claim 60, wherein the sequences of instructions that cause the machine to determine, in response to receiving the write request from the first requester, whether the component is available comprise sequences of instructions that, when executed, cause the machine to determine, in response to receiving the write request from the first requester, a presence of the first indicator; an absence of an identifier of a requester other than the first requester in the set-by-write register.

68. (previously presented):

The article of claim 60, wherein the sequences of instructions that cause the machine to determine, in response to receiving the write request from the first requester, whether the component is available comprise sequences of instructions that, when executed, cause the machine to determine, in response to receiving the write request from the first requester, that the component is available based on an external indicator.

69. (previously presented):

The article of claim 68, wherein the sequences of instructions that cause the machine to determine, in response to receiving the write request from the first requester, based on an external indicator that the component is available comprise sequences of instructions that, when executed, cause the machine to determine, in response to receiving the write request from the first requester, that the component is available based on a flag.

70. (currently amended):

The article of claim 60, further comprising sequences of instructions that, when executed, cause a machine to:

receive from a second the first requester a value indicating that the shared resource is available; third indicator increasing access to the component;
determine, because of receiving the value indicating that the shared resource is available, third indicator, that access to the component has been increased; and
replace the contents of the set-by-write register second indicator with the value indicating that the shared resource is available, third indicator increasing access to the component.

Appl. No. 10/037,670
Amtd. dated 11/30/2005
Reply to Office Action of 08/29/2005

71. (cancelled)

72. (currently amended):

An apparatus comprising:

a resource;

a storage area in the resource;

a first value in the storage area, which the storage area changes to a second value that comprises an identifier of a requester in response to a request from a the requester to write an the identifier of the requester that is included in the request to the storage area; and

the second value in the storage area.

73. (original):

The apparatus of claim 72, wherein the resource comprises a peripheral device in a computer system.

74. (original):

The apparatus of claim 72, wherein the storage area comprises a register.

75-76. (cancelled)

77. (original):

The apparatus of claim 72, wherein the first value indicates that the resource is available.

78. (original):

The apparatus of claim 72, wherein the second value reduces access to the resource.

79. (original):

The apparatus of claim 72, wherein the storage area is linked to other storage areas containing the first value.

80. (original):

The apparatus of claim 79, wherein the other storage areas change the first value to the second value when the storage area changes the first value to the second value.